Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

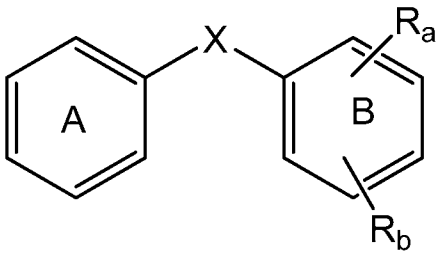
Listing of Claims:

1. (previously presented) A composition which selectively reduces blood flow to a tumor region and forms a reactive oxygen species *in vivo*, wherein said composition comprises an anticancer agent having a quinone, quinone prodrug, catechol or catechol prodrug moiety, provided that said composition is not combretastatin A-1 or a salt, ester or prodrug thereof.

2. (original) The composition of claim 1 wherein said moiety is in the *ortho* position.

3. (original) The composition of claim 1 wherein said anticancer agent is a tubulin binding agent.

4. (previously presented) A compound comprising the structure of formula I:
wherein:



- Ring A is optionally substituted with one to five substituted selected from
  a) a C_1, C_2, C_3, C_4 or C_5 branched or straight-chain lower alkoxy, cycloalkoxy, heterocycloalkoxy, aryloxy, or lower alkanoyloxy;
  b) a halogen or trhaloalkyl;
  c) a C_1, C_2, C_3, C_4 or C_5 branched or straight chain lower alkyl, allyl, allyloxy, vinyl, or vinyloxy;
  d) an OH, or a C_1, C_2, C_3, C_4 or C_5 primary, secondary, or tertiary alcohol;

e) NH_2 or an amino, lower alkylamino, arylamino, aralkylamino, cycloalkylamino, heterocycloamino, aroylamino, aralkanoylamino, amido, lower alkylamino, arylamido, cycloalkylamido, heterocycloamido, aroylamido, or aralkanoylamido; or

f) oxo, lower alkanoyl, thio, sulfonyl, sulfonamide, nitro, nitosyl, cyano, carboxy, carbamyl, aryl, or heterocycle;

- Ring B comprises at least one structure denoted by R_a and R_b which represent an *ortho*-quinone moiety (-(C=O)-(C=O)-), *ortho*-catechol (-(C-OH)-(C-OH)-) or *ortho*-catechol pro-drug moiety (-(C-O-Prodrug moiety)-(C-O-Prodrug moiety)-); and the remaining carbons of Ring B are optionally substituted with one ot five substituents selected from

g) a C_1, C_2, C_3, C_4 or C_5 branched or straight-chain lower alkoxy, cycloalkoxy, heterocycloalkoxy, aryloxy, or lower alkanoyloxy;

h) a halogen or trhaloalkyl;

i) a C_1, C_2, C_3, C_4 or C_5 branched or straight chain lower alkyl, allyl, allyloxy, vinyl, or vinyloxy;

j) an OH, or a C_1, C_2, C_3, C_4 or C_5 primary, secondary, or tertiary alcohol;

k) NH_2 or an amino, lower alkylamino, arylamino, aralkylamino, cycloalkylamino, heterocycloamino, aroylamino, aralkanoylamino, amido, lower alkylamino, arylamido, cycloalkylamido, heterocycloamido, aroylamido, or aralkanoylamido; or

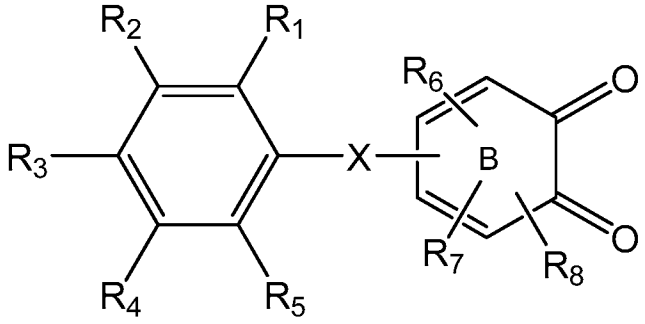
l) oxo, lower alkanoyl, thio, sulfonyl, sulfonamide, nitro, nitosyl, cyano, carboxy, carbamyl, aryl, or heterocycle; and

- Bridge X is selected from the group consisting of alkenes (-CR_9=CR_{10}-), alkanes (CR_9-$CR_{11}R_{12}$), alkynes, amides (-NR_9-CO=), amines (-NH-, -NR_8-, or –CR_9-N-), carbonyl (-CO-), ethers (-C R_8-O-), sulfonamides (-NR_8-SO_2-), sulfonates (-O-SO_2-), aryls, oxo (-O- or –O R_8-), thio (-S-) cycloalkyls, propanones (-(C=O)-CR_8=CR_9-); wherein R_8, R_9, R_{10} , or R_{11} are alternatively H, alkyl, amino, amido, cyano, hydroxyl, or carboxyl;

provided that said compound is not combretastatin A1 or a salt, ester, or prodrug thereof.

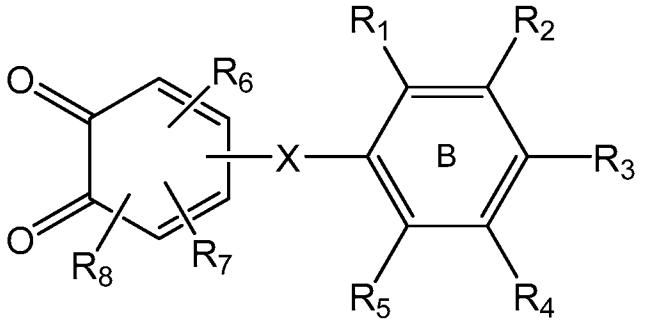
5. (previously presented) A compound comprising a quinone, quinone prodrug, or a pharmaceutically acceptable salt form thereof having one of the following general structures:

Ia:



or

Ib:



wherein:

a. at least one of R_1, R_2, R_3, R_4, R_5, R_6, R_7 or R_8 are the same or different and are selected from

i) a C_1, C_2, C_3, C_4 or C_5 branched or straight-chain lower alkoxy, cycloalkoxy, heterocycloalkoxy, aryloxy, or lower alkanoyloxy;

ii) a halogen or trhaloalkyl;

iii) a C_1, C_2, C_3, C_4 or C_5 branched or straight chain lower alkyl, allyl, allyloxy, vinyl, or vinyloxy;

iv) an OH, or a C_1, C_2, C_3, C_4 or C_5 primary, secondary, or tertiary alcohol;

v) NH_2 or an amino, lower alkylamino, arylamino, aralkylamino, cycloalkylamino, heterocycloamino, aroylamino, aralkanoylamino, amido, lower alkylamino, arylamido, cycloalkylamido, heterocycloamido, aroylamido, or aralkanoylamido; or

vi) oxo, lower alkanoyl, thio, sulfonyl, sulfonamide, nitro, nitrosyl, cyano, carboxy, carbamyl, aryl, or heterocycle;

and the remaining R_1, R_2, R_3, R_4, R_5, R_6, R_7, or R_8 are H; and

b. X is selected from the group consisting of alkenes ($-CR_9=CR_{10}-$), alkanes ($CR_9-CR_{11}R_{12}$), alkynes, amides ($-NR_9-CO=$), amines (-NH-, $-NR_8-$, or $-CR_9-N-$), carbonyl (-CO-), ethers ($-C\ R_8-O-$), sulfonamides ($-NR_8-SO_2-$), sulfonates ($-O-SO_2-$), aryls, oxo (-O- or $-O\ R_8-$), thio (-S-) cycloalkyls, propanones ($-(C=O)-CR_8=CR_9-$); wherein R_8, R_9, R_{10} , or R_{11} are alternatively H, alkyl, amino, amido, cyano, hydroxyl, or carboxyl.

6. (original) The compound of claim 5, wherein X forms a covalent linkage between Ring Z and B comprising two contiguous atoms of the same or different element.

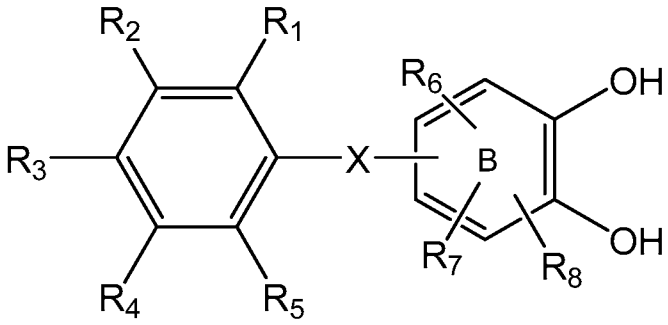
7. (original) The compound of claim 6, wherein the covalent linkage is an ethylene group (-CH=CH-) and Rings A and B are in a cis (Z) isomeric configuration.

8. (original) The compound of claim 7, wherein R_2, R_3, and R_4 are methoxy.

9. (original) The compound of claim 5, wherein said quinone is a bioreductive agent which is reductively activated *in vivo* to form a catechol capable of participating in a redox cycling reaction to form one or more Reactive Oxygen Species ("ROS").

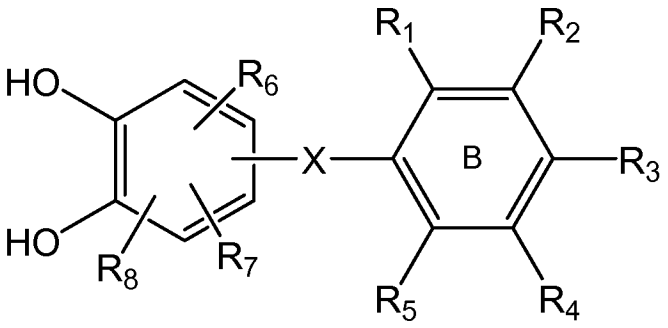
10. (previously presented) A compound comprising a quinone, quinone prodrug, or a pharmaceutically acceptable salt form thereof having one of the following general structures:

IIa:



or

IIb:



wherein:

a. at least one of R_1, R_2, R_3, R_4, R_5, R_6, R_7 or R_8 are the same or different and are selected from:

i) a C_1, C_2, C_3, C_4 or C_5 branched or straight-chain lower alkoxy, cycloalkoxy, heterocycloalkoxy, aryloxy, or lower alkanoyloxy;

ii) a halogen or trhaloalkyl;

iii) a C_1, C_2, C_3, C_4 or C_5 branched or straight chain lower alkyl, allyl, allyloxy, vinyl, or vinyloxy;

iv) an OH, or a C_1, C_2, C_3, C_4 or C_5 primary, secondary, or tertiary alcohol;

v) NH_2 or an amino, lower alkylamino, arylamino, aralkylamino, cycloalkylamino, heterocycloamino, aroylamino, aralkanoylamino, amido, lower alkylamino, arylamido, cycloalkylamido, heterocycloamido, aroylamido, or aralkanoylamido; or

vi) oxo, lower alkanoyl, thio, sulfonyl, sulfonamide, nitro, nitrosyl, cyano, carboxy, carbamyl, aryl, or heterocycle;

and the remaining R_1, R_2, R_3, R_4, R_5, R_6, R_7, or R_8 are H; and

b. X is selected from the group consisting of alkenes (-CR_9=CR_{10}-), alkanes (CR_9-$CR_{11}R_{12}$), alkynes, amides (-NR_9-CO=), amines (-NH-, -NR_8-, or –CR_9-N-), carbonyl (-CO-), ethers (-C R_8-O-), sulfonamides (-NR_8-SO_2-), sulfonates (-O-SO_2-), aryls, oxo (-O- or –O R_8-), thio (-S-) cycloalkyls, propanones (-(C=O)-CR_8=CR_9-); wherein R_8, R_9, R_{10} , or R_{11} are alternatively H, alkyl, amino, amido, cyano, hydroxyl, or carboxyl

provided that said compound is not combretastatin A1 or a salt, ester, or prodrug thereof.

11. (original) The compound of claim 10, wherein X forms a covalent linkage between Ring A and B, comprising two contiguous atoms of the same or different element.

12. (original) The compound of claim 11, wherein the covalent linkadeis an ethylene group (-CH=CH-), and Rings A and Bare in a cis (Z) isomeric configuration.

13. (original) The compound of claim 12, wherein R_2, R_3 and R_4 are methoxy.

14. (original) The compound of claim 13, wherein R_8 is selected from:

i) a C_1, C_2, C_3, C_4 or C_5 branched or straight-chain lower alkoxy, cycloalkoxy, heterocycloalkoxy, aryloxy, or lower alkanoyloxy;
ii) a halogen or trhaloalkyl;
iii) a C_1, C_2, C_3, C_4 or C_5 branched or straight chain lower alkyl, allyl, allyloxy, vinyl, or vinyloxy;
iv) an OH, or a C_1, C_2, C_3, C_4 or C_5 primary, secondary, or tertiary alcohol;
v) NH_2 or an amino, lower alkylamino, arylamino, aralkylamino, cycloalkylamino, heterocycloamino, aroylamino, aralkanoylamino, amido, lower alkylamino, arylamido, cycloalkylamido, heterocycloamido, aroylamido, or aralkanoylamido;
vi) oxo, lower alkanoyl, thio, sulfonyl, sulfonamide, nitro, nitrosyl, cyano, carboxy, carbamyl, aryl, or heterocycle;

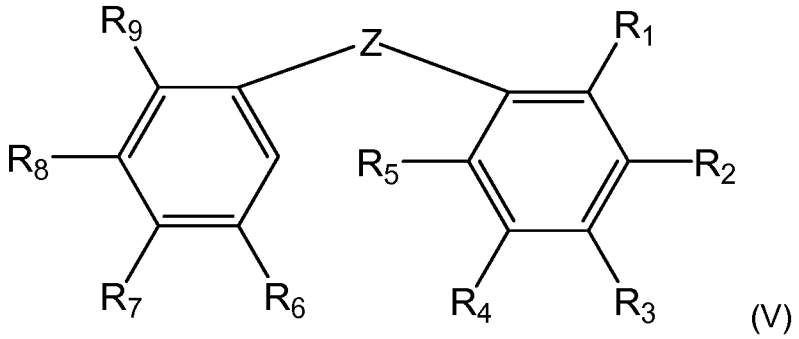
and the remaining R_1, R_5, R_6, and R_7 are H.

15. (original) The compound of claim 14, wherein R_8 is OH or –O-CH_2-CH=CH_2.

16. (original) The compound of claim 4, wherein said catechol is a biooxidative agent which is oxidatively activated *in vivo* to form a quinone capable of participating in a redox cycling reaction to form one or more Reactive Oxygen Species ("ROS").

Claims 17-33 CANCELED

34. (original) A composition of the following formula (V):



(V)

wherein

a. Z is an ethylene (-CH=CH-) bridge in the cis (Z) isomeric configuration;

b. R_1 and R_2 are OH or a prodrug form thereof;

c. at least one of R_3, R_4, R_5, R_6, R_7, R_8, and R_9 are optionally

i) a C_1, C_2, C_3, C_4 or C_5 branched or straight-chain lower alkoxy, cycloalkoxy, heterocycloalkoxy, aryloxy, or lower alkanoyloxy;

ii) a halogen or trhaloalkyl;

iii) a C_1, C_2, C_3, C_4 or C_5 branched or straight chain lower alkyl, allyl, allyloxy, vinyl, or vinyloxy;

iv) an OH, or a C_1, C_2, C_3, C_4 or C_5 primary, secondary, or tertiary alcohol;

v) NH_2 or an amino, lower alkylamino, arylamino, aralkylamino, cycloalkylamino, heterocycloamino, aroylamino, aralkanoylamino, amido, lower alkylamino, arylamido, cycloalkylamido, heterocycloamido, aroylamido, or aralkanoylamido;

vi) oxo, lower alkanoyl, thio, sulfonyl, sulfonamide, nitro, nitrosyl, cyano, carboxy, carbamyl, aryl, or heterocycle; and

the remaining R_3, R_4, R_5, R_6, R_7, R_8 and R_9 are hydrogen.

35. (original) The composition of claim 34, wherein at least three of R_6, R_7, R_8, and R_9 are not hydrogen.

36. (original) The composition of claim 35, wherein R_6, R_7 and R_8 are the same.

37. (original) The composition of claim 36, wherein R_6, R_7 and R_8 are methoxy.

38. (original) The composition of claim 37, wherein R_3 is

i) a C_1, C_2, C_3, C_4 or C_5 branched or straight-chain lower alkoxy, cycloalkoxy, heterocycloalkoxy, aryloxy, or lower alkanoyloxy;
ii) a halogen or trhaloalkyl;
iii) a C_1, C_2, C_3, C_4 or C_5 branched or straight chain lower alkyl, allyl, allyloxy, vinyl, or vinyloxy;
iv) an OH, or a C_1, C_2, C_3, C_4 or C_5 primary, secondary, or tertiary alcohol;
v) NH_2 or an amino, lower alkylamino, arylamino, aralkylamino, cycloalkylamino, heterocycloamino, aroylamino, aralkanoylamino, amido, lower alkylamino, arylamido, cycloalkylamido, heterocycloamido, aroylamido, or aralkanoylamido;
vi) oxo, lower alkanoyl, thio, sulfonyl, sulfonamide, nitro, nitrosyl, cyano, carboxy, carbamyl, aryl, or heterocycle; and

R_4, R_5, and R_9 are hydrogen.

39. (previously presented) The composition of claim 38, wherein R_3 is $–CH_3$, $-CH_2CH_3$, $-OCH_2CH_3$, -F, -Br, $-CF_3$, $-CBr_3$, -OH, $-O-CH_2-CH=CH_2$, $-CH_2-CH=CH_2$, $-NH_2$, $-NO_2$, -cyano, -carboxy, or –benzyl.

40. (original) The composition of claim 39, wherein R_6, R_7, and R_8 are F.

41. (original) The composition of claim 40, wherein R_3 is

i) a C_1, C_2, C_3, C_4 or C_5 branched or straight-chain lower alkoxy, cycloalkoxy, heterocycloalkoxy, aryloxy, or lower alkanoyloxy;
ii) a halogen or trhaloalkyl;
iii) a C_1, C_2, C_3, C_4 or C_5 branched or straight chain lower alkyl, allyl, allyloxy, vinyl, or vinyloxy;
iv) an OH, or a C_1, C_2, C_3, C_4 or C_5 primary, secondary, or tertiary alcohol;
v) NH_2 or an amino, lower alkylamino, arylamino, aralkylamino, cycloalkylamino, heterocycloamino, aroylamino, aralkanoylamino, amido, lower alkylamino, arylamido, cycloalkylamido, heterocycloamido, aroylamido, or aralkanoylamido;
vi) oxo, lower alkanoyl, thio, sulfonyl, sulfonamide, nitro, nitrosyl, cyano, carboxy, carbamyl, aryl, or heterocycle; and

R_4, R_5, and R_9 are hydrogen.

42. (previously presented) The composition of claim 41, wherein R_3 is $–CH_3$, $-CH_2CH_3$, $-OCH_2CH_3$, -F, -Br, $-CF_3$, $-CBr_3$, -OH, $-O-CH_2-CH=CH_2$, $-CH_2-CH=CH_2$, $-NH_2$, $-NO_2$, -cyano, -carboxy, or –benzyl.

Claims 43-56 CANCELED

57. (original) A composition selected from the group consisting of
6-[(Z)-2-(3,4,5-Trimethoxyphenyl) vinyl]-1,2-dihydroxybenzene,
3-Ethyl-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-1 ,2-dihydroxybenzene,
3-Methyl-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-1,2-dihydroxybenzene,
4-Bromo-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-1,2-dihydroxybenzene,
4-Phenyl-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-1,2-dihydroxybenzene,
3-Allyl-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-1,2-dihydroxybenzene,
4-Fluoro-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-1,2-dihydroxybenzene,
2,3,4-Trihydroxy-6-[(Z)-2(3,4,5-trimethoxyphenyl)vinyl]-benzene,
2,3-Dihydroxy-4-ethoxy-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-benzene,
2,3-Dihydroxy-4-allyloxy-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-benzene,

4-Nitro-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-2,3-dihydroxybenzene,

2',3'dihydroxy -3,5 dichloro4,4'-dimethoxy-(Z)-stilbene,

2',3' dihydroxy-4'-methoxy-3,4,5-trifluoro-(Z)-stilbene,

2,3-Dihydroxy-4-methoxy-[(Z)-2-(3,4,5-trimethoxyphenyl) Beta-lactam]-benzene,

2',3' diphosphate-3,4,5-trimethoxy-(Z)-stilbene, tetrasodium salt;

3',4' diphosphate-3,4,5-trimethoxy-(Z)-stilbene, tetrasodium salt;

and combinations thereof.